

Fact Sheet

Projected Lake Mendocino Water Supply, Russian River Water Levels April 12, 2007

Projected Conditions at Lake Mendocino

- 1. Due to a lack of rain this year and a thirty-three percent reduction in water flow from the Potter Valley Project, projections indicate Lake Mendocino could reach dangerously low water supply levels by this fall.
- 2. Lake Mendocino levels are projected to fall to historically low levels by September/October. Water levels could decline to only 10,000 acre-feet of water in Lake Mendocino by September/October.
- 3. Lake Mendocino is a crucial part of the Russian River Project, which supplies a tremendous amount of water flow to the Russian River for threatened salmon species and agricultural and municipal water supply.

Current Conditions at Lake Mendocino

- 1. Lake Mendocino water storage is about 69,000 acre-feet. Water storage has been falling by about 200-300 acre-feet per day for several weeks. Projections show an increase in the rate of storage reduction.
- 2. Lake Mendocino has a total capacity of 122,142 acre-feet. The water supply pool capacity is currently estimated to be 69,000 acre-feet. Capacity over and above the water supply pool is used for flood control purposes.
- 3. Releases from the Eel River to the Potter Valley Project have been occurring at 43 cfs.
- 4. The Agency makes discharges from Lake Mendocino as needed to ensue that state mandated minimum stream flow (185 cfs) is present in the Russian River between Lake Mendocino and Healdsburg. Discharge from Lake Mendocino to the upper Russian River has been at rates of about 168 cfs.
- 5. Based on the amount of water coming into the reservoirs, 2007 is projected to be designated a normal rainfall year with dry spring conditions for both the Russian River and Eel River basins.

Current/Past Data:

- 1. Current Russian River flow:
 - a. Release 168 cfs, confluence 196 cfs, Hopland 228 cfs, Cloverdale 265 cfs, Healdsburg 348 cfs, Hacienda 475 cfs.
- 2. Last Year, Same Period: Release: 759 cfs, confluence 1230 cfs, Hopland 2080 cfs, Cloverdale 3130 cfs, Healdsburg 3670 cfs, Hacienda 7260 cfs.
- 3. Current Reservoir Levels:

a. Coyote Valley Dam: 727.9 ft; 69175 AFb. Warm Springs Dam: 450.36 ft; 243,199 AF

4. Last Year, Same Period:

a. Coyote Valley Dam: 748.3 ft; 86,877 AFb. Warm Springs Dam: 451.76 ft; 246,893 AF

Decision 1610 and Russian River Stream Flow

- 1. Sonoma County Water Agency is the local sponsor for both the Warm Springs and Coyote Valley Dams and partially financed their construction. As a result, the Agency has the authority to release water from the water supply pools of both reservoirs.
- 2. Minimum required flows in the Russian River were mandated by the State Water Resources Control Board when it issued Decision 1610 in April of 1986.
- 3. Based on Decision 1610, the Agency is currently required to maintain flow at no less than 185 cubic feet per second at a gauging station between Lake Mendocino and Healdsburg.
- 4. If Dry Spring comes true, Decision 1610 provides for some limited relief in streamflow requirements thru the end of the calendar year.

Fisheries Concerns

- 1. By fall, Lake Mendocino is projected to have approximately only 10,000 acre-feet of water to be utilized for release into the upper Russian River at the time Chinook salmon will be migrating and spawning in the upper Russian River.
- 2. Water quality may be impacted, including higher water temperature, due to the extreme low level of the water utilized for release in the upper Russian River. Impacts on water quality may negatively impact Chinook migration and spawning.
- 3. The Agency monitors fish passing by its water supply facilities near Wohler Bridge upstream from Guerneville on the Russian River. In 2006, approximately 4,500 Chinook salmon were in the Russian River upstream from these facilities at the same time projections indicate extremely low water levels in Lake Mendocino this year.

4. The Agency will closely monitor changes in any future stream flow resulting from these reduced water releases and will continue to monitor the condition of fish present in the Russian River.

Potter Valley Project Background

- 1. PG&E owns and operates the Potter Valley Project, which is located on the Eel River and diverts water from the Eel River to the East Branch of the Russian River to generate power.
- 2. In 2004, a new flow regime was implemented for the Potter Valley Project that regulates the minimum and maximum stream flow requirements for the East Branch Russian River.
- 3. According to a letter issued by PG&E on October 16, 2006 those stream flow requirements were not appropriately executed, resulting in more water being released through the Potter Valley Project from 2004-2006.
- 4. According to PG&E the additional releases were due to:
 - Additional releases in 2005 and 2006 that occurred during times when Cape Horn Dam was spilling water.
 - Additional releases that occurred in 2004, 2005 and 2006 as a result of PG&E's efforts to comply with the East Branch Russian River minimum flow requirements.
 - Additional releases that occurred in the fall of 2004 as a result of a delay in making the required seasonal adjustments.

About the Potter Valley Project:

- 1. The 9.4 megawatt Potter Valley Project is located on the Eel River and East Branch Russian River in northern California.
- 2. The uppermost portion of the Potter Valley Project includes Scott Dam and the storage reservoir it impounds, Lake Pillsbury, which are on the Eel River.
- 3. Below Scott Dam, the Eel River flows twelve miles into Van Arsdale Reservoir, created by Cape Horn Dam.
- 4. Cape Horn Dam has upstream and downstream fish passage facilities, enabling salmon and steelhead to use the reach between Cape Horn and Scott Dam. There are no fish passage facilities at Scott Dam.
- 5. At Van Arsdale, water is either released from or spills over Cape Horn Dam, where it flows northwest in the Eel River approximately 150 miles to the Pacific Ocean, or it is conveyed south by tunnel and penstock to the Potter Valley powerhouse.
- 6. The Potter Valley powerhouse is located in the upper Russian River Basin, and is the source of most of the water in the East Branch Russian River.
- 7. The East Branch Russian River flows south and joins with the mainstem Russian River, which also drains into the Pacific Ocean. Historically, an average of about 131,000 acre-feet was diverted annually from the Eel River Basin into the Russian River Basin.
- 8. The new flow requirements issued in 2004 were estimated to result in a 15% annual reduction in the flows through the Potter Valley Powerhouse.

9. In 2006, the National Oceanic and Atmospheric Administration (NOAA) and PG&E reduced flows from the Potter Valley Project to the East Branch Russian River by approximately 33%.

Common Water Units

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1 cubic foot = 7.48 gallons

1 cubic foot/sec = 450 gallons/minute = 27,000 gallons/hour

1 cubic foot/sec = 2 acre-feet/day

1 acre-foot = 325,851 gallons = 43,560 cubic feet
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